INVESTIGATIONS OF STATE SENATORS. OEL B. ERHARDT GIVES THE COMMITTEE THE BEN-EFIT OF HIS EXPERIENCE AS A POLICE COMMIS-SIGNER-EVIL OF A DEPARTMENT WITH FOUR HEADS-CORRUPTION IN THE STREET-CLEANING BUREAU-A COMMISSIONER WHO THINKS HIS SALARY SHOULD BE CUT DOWN-THE ASSISTANCE REQUIRED IN THE OFFICE OF THE CLERK OF

THE SUPERIOR COURT.

The special committee of the State Senate to investigate the expenses of this city resumed its labors yesterday morning in the Mayor's private office. All the members were present, and many persons interested in the facts disclosed were also in attendance. Joel B. Erhardt gave his opinion of the Police Department and its management. He considered that it was unnecessary and unwise to have four Police Commissioners. The inspectors of election should be appointed by some other authority. . The street cleaning should be under the supervision of the Department of Public Works. Thomas Dunlap thought the salary connected with his office should be reduced. Judge McAdam, of the Marine Court, and Thomas Boese, Clerk of the Superior Court, were also examined.

DETAILS OF THE SESSION.

No witnesses had arrived when the Committee was ready to begin its labors yesterday, so the sergeant-at-arms was sent to the different offices to see if he could flud anybody who had been served with a subpœns. Henry Moore, who was present, aunounced that he would like to give some testimony, and he was allowed to do so. He said that he had suffered long from wagons being placed in the street in which he lived, and told of his efforts to have them removed by the Bureau of Incumbrances. Senator McCarthy said the committee was not in session to hear special cases of grievances, Ex-Police Commissioner Erhardt was next called. He said that he had been a resident of the city for thirty-five years, and had had some practical expericace in the workings of the Police Department from December 31, 1875, until May 18, 1879.

Senator McCartay—Can you give the committee any information to aid it in finding out how the expenses of that department can be reduced?

that department can be reduced?
Well, my views have always been very radical. I hardly knew where to begin.
Begin at the beginning.
The subject is like a ball; it has no beginning. My opposion is that the more commissioners you have in the The subject is like a ball; it has no beginning. My epinion is that the more commissioners you have in the Poince Board the worse off the Department is, and consequently the greater the check good government receives. You would scarcely expect a bricage to do much service if there were four cen-rais commanding, and two of them appointed because they disagreed with the other two. You would scarcely expect a banking firm to succeed two partners of which became partners because they were in daty bound to disagree with the others. The analogy is perfect in recard to the generals, because there are 2,500 uniformed men subject to discipline more rigid than army discipline, and the analogy of the banking firm is not so imperfect when you consider the department disburses \$4,000,000 annually. The fewer the commissioners the bester, and if there were none at all it would probably be best. The only reason for appointing two commissioners to disagree with two others is on account of the appointment of inspectors of election; and if these appointments are a necessary part of the commissioners to the appointment are a necessary part of the commissioners. is on account of the appointment of inspectors of elec-tion; and it these appointments are a necessary part of the department, the appointments are wise. But I might almost say that there is not a bureau of the de-partment which is not sucject to barder and sale in every office. In regard to inspectors, they could be an-epointed by any two officials and these appointments need not be connected with the police force. There might be some such plan as in the appointment of supervisors and marshals under the appointment of supervisors and marshals under justes Satass laws. Tuese are made without creat-board that demoralizes the whole Federal service, as the Excise Department properly belongs to the e Department. It seems straine that the power to Police Department. It seems strange that the power to make arrests in a troublescine section where figure is seed should be vested in one department and the power to amout the accuse left to another board. The Street-Chaning Department does not property belong to the Police Department. I wound have it placed with the Board of He and. If that is objectionable I see no reason why it does not belong to the Department of Public Works. This department gives permit to dimp sand in the sheets, which is bown by the what he very direction, and mother department at has to clean it up. A saved up cleaning the rast amount of money could be saved in cleaning to "How ?" quickly interrupted Senator Strahan,

who had been closely listening to Mr. Erhardt's re-

By a proper arrangement of the force. Under the present taws, however, you can't clean the streets properly. The law how is that the ritue can't be taken out to sea without the Shore Inspector's permit. The power to give or withhold this permit may paralyze the houest effects of any four men. Money can be saved in proper organization, in comploying good men at fair wages and by paying a tribe more than for ordinary labor. The men's positions should be permanint, and they should not be assumed.

rthy-Is the man obliged to pay a cer-

Work is able so quiety that he is your opinion based on a knowledge of the nees, or here runners?

On three years' careful study. I prepared a document once which showed that 250 out of 300 drivers in the once which showed that 250 out of 300 drivers in the once which showed that 250 out of 300 drivers in the once which showed that 250 out of 300 drivers in the once which showed the position.

once which showed that 250 out of 300 drivers in the department were not those appointed to the position. Many of the arrivers work for 50 cents or 75 cents a day. The department pays 83, but the difference goes to the intermentate quan. The medic system oward to be broken up. I one time had a paper prepared which showed. I tunk that seventy-five per cent of the employes in that department were found wanting in their duties. Many of the men, instead of taking a full food of cleanings, only took about one-quarter or one-grafth of a load. The cvits artea from the fact that the carrianch aid not get full pay. The moddle men coming in for their share, protopted the desire to take as light a toad as possible. Then the sweepers are bad. Some of them are drowes; they are not hard workers. Ignit a tong as possions. Then the Sweepers are ton.
Some of them are drones; they are not hare workers.
Of some I can only speak for the time when I was in the
Beard. They did not give eight hours' work. All efforts
of reform in that direction fasied, and will fail so long
as employment or labor is made conditional on politics. MORE ABOUT THE MARINE COURT.

At this point in the examination, Judge McAdam of the Marine Court appeared in the room. As he had been summoned as a witness, it was decided proper to take his testimony at once. He was asked if the expenses in his court could not be reduced, and he replied that all the reduction possible was made in 1877, and it was utterly impossible to get along with less help. He had three attendants in court and sometimes he had three juries out at once. The duties of the attendants were to see to the jurors, to lock them up, and wait their orders. When not at tending to these duries their services were needed in court. They might sometimes be in court doing nothing, but there was no telling when they would be wanted. He was not familiar with the duties of persons employed in the Clerk's office.

MR. ERHARDT RESUMES. Mr. Erhardt then continued his testimony:

The majority of the men employed in the Street Clean ing Department would do their work properly if they were treated fairly, and knew that as lone as they werked they could retain their pinees. I think another way of saving money would be to adopt a simple unli-form for the men. If a person is in uniform he is more apt to do lits work, because he would be easily marked if he did not.

apt to do his work, because he would have did not.

Senator McCarthy—I want to get some idea of the middle men. What do they pay their driver: I

If I remember the report, I don't think any of them get over \$1.75—I minut the litted over.

There is not a great profit, therefore, on \$3 a day. How do the middle men make the profit!

Go the middle men make the profit!

are a poor lot, holding but a little.
Sum for Brady-is not each cars required to dump ten
loads, and are they not all under the charge of an inspector!

stor I am the means nothing; many of the inspectors are no ter than the meat. The fault is in the system. I will other to say that there is not a man this committee or in the whole Legislature or the world amount the present system of ortaining labor had clarice of it as a business. One had of the abered mean employed could do more work than all se employed now. g.oyed new. McCarth, -How about removing the dirt by

Contract!

The Board took up that question once. They advertised for bids, and stipulated that if the work was not done to the statisfaction of the Board it would have the right to abrogate the contract. Then the polinical differences came in acain. No contractor would attempt to remove the refuse on these terms without properly lightion. In fact, I don't see how you can get rid of the material without legislation. The great problem is, how to dispose of the cleanings.

Senator Straban—The city owns no dumping ground, from all

re the means for taking the cleaning to sea adequate !

Are the means for taking the element to sen adequate to No; writched.
You can't so to deep sen; there are acts of the Legis-lature which prevent duming in the barbor and the Department has bad frequent efficients with the Shore Inspector. The cay is ser andy hampered a good deal. There are some vacant to a on the water from, the owners of which would be within to have them thind by the Department. The Board of Health then steps in And complains that such a course would be deleterious to the health. If not to take generating, the next, Senator M. Carrley—Does the these of proper granulation among the employer teach the numbing of the material?

I really think that as far as getting the stuff to Sometimes acadears happen to the scows, ed over with forty Italian on board. Atten-n dn't get an Italian or a Russian, or anyone

des, to go to sea.

Have you any opinions as to how the material cound e dumping properly!

Yes; by passing one or two nets. The Board ought to nave authorny to purchase steam unloading scows which would steam out against high water or head

winds to a proper dumping place without interference from the Shore Inspector.

POSITION OF THE SHORE INSPECTOR. Senator Stranan then asked if the office of Shore Inspector was created for the purpose of placing an obstacle in the way of the Street Cleaning Department in performing its duties. Mr. Erhardt replied that it was certainly strange that a large city like New-York could not remove its garbage without a permit from an insignificant officer. Senator Stra-han added that all his efforts were made in behalf of Coney Island. In regard to the bureaus under the Police Department that do not, in his opinion,

properly belong there, Mr. Ethardt said:

I think that the Bolier Department should be some where clas. The Commissioners sign thousands of per mils to run a bolier, and there isn't one of them that knows anything about a bolier. That department belongs to the Fire Department. We found, in looking or the law, that the man who must examine the applications be a policeman. We wanted to appoint a marter the office, and tried to get an expert. When we found one we had to appoint him as a policeman, but when he found he was liable to be transferred opest duty he wouldn't take the office. We finally found mother expert, but he was over thirty years of age. Senator McCarthy—What have you to say about the deproperly belong there, Mr. Ethardt said:

atised force I There are certain places in the city at which the Board considers it was to place a policeman on account of the considers it was to place a policeman on account of the considers in those posces. The Normal College was one the House of the Holy Family was another. The Board depted the rule that the clier men should be assumed this duty, and these positions have been filled by men factward years. It himk some of these old men ough to be retired on very nearly full pay. After a man one served twenty one years as a guardian of the beare, and there is nothing against his conduct, I don't see why he should not be pensioned. why he should not be pensioned. nator Milis-Would it improve the efficiency of the

abtedly; there are between 500 and 600 men on rectring them. From the time a man goes on the rectring them. From the time a man goes on the rectal avenues of business are closed to him. McCarthy-Is the pay too large !

not nineteen police surgeons more than a No; they have enough to do, and only draw a salary

policement as are found in the Street Cleaning Department I

No, the principal reason is that the tenure of office is secured. The Commissioners have no power to dismiss an officer without charge. A man who knows he can't be turned out as long as he does his duty, becomes a better officer. Then there is another thing I with it speak of, that which leads to good government in the departments tends to economy. I alime to the practice of compelling uniformed members to contribute money for election purposes. It is a hardship, and is productive of an inter disruption of discipline. No steps were taken in this direction until last election. I am informed that there was a large amount of money raised. It the Legislature and powers in authority do not project the men the force will become utterly disorganized. ized. Senator Strahan—Is there any reason for dividing th

Senator Strahan—Is there any reason for dividing the Board point-cally if the appointment of Inspectors of Election is taken out of its hands?

No. In all large eities the Police Department is under the charge of one man. You will not find the Police Department in any of the large cities in Europe appointing unspectors of election, cleaning the streets or giving permits to run a builet.

You think the political division is the root of all evil? Yes.

EXAMINATION OF THE COMMISSIONER OF JURORS.

Thomas Dunlap, Commissioner of Jurors, wa then called:

Senator McCarthy—I see you get \$15,000 a year that's a pretty large salary.

Yes, it is a large salary.

Do you superintend the drawing for all the courts in the city!

he city!
All the State courts.
How do you get your jurors!
From the directory and registry, and in other ways.
What other ways!

What other ways!

Call on the Tax Commissioner.

Do you consider the duties of the office responsible!

Yes, it is a very responsible position. I had nothing to do with making the salary, and I did not seek the office.

Well, I want to see if we can't cut it down.

The Legislature passed an action! yes.

The L gishature passed an act last year.
Yes, and we can pass another one next year. I want
o see if it ought not to be less. I taink it ought to be less. Senator Bixby-The entire community is unan

on that point.
Senator McCarthy-I want to find out if work has been properly done.

Mr. Duning—I think the judges will bear me out when I say that I have attended to the duties faithfully. Do I understand you to say that you taink the salary is too large?

I always thought it was too large.

What would you fix it at I

I always thought it was too large.

What would you fix it at 7

Lone \$7,500 to \$10,000. My predecessor had it to creased from \$10,000 to \$15,000. It is the same as the salary of the City Judge. I will say that it would be uttern impossible to run the office on \$6,000 a year, as proposed by the act of last year.

How often is the jury list made up 7

We begin Just after the directory is issued and send interes to 60,000 or 70,000.

Are any names stressen off?

Are any names stricken off ?
Yes, by the Commissioner.
For what purpose?
Because they are not considered competent.
At their solicitation?
Yes.

Any consideration for being checked off t

Any consequence of any person being excused at also we solicitation and for a consideration I.

I have heard of it, but it was not in my office. I would take such a name off the roll, because I would not consideration agood jaror. Thave carried the attention of the Board to cases where deputy sheriffs have been suspected, and I have taken its advice. I have known instances under Sheriff Conner, where he removed two stances under Sheriff Conner, where he removed two criby—Is the man obtged to pay a certive I
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table to get at the proof. It

Is thereany other source of income in your office ex-cept the salaries ! No. sir.

No. 817. Cau't the office be run for less money 1 It cau't be run properly for less than \$11.000 per MATTERS IN THE SUPPLIEDE COURT.

Thomas Boese, Clerk of the Superior Court, was the last witness.

Senator Strahan—The committee wants to ascertain if you can't reduce expenses in your office. No. str. 1 can't. What are the duties? No. sir, I can be what it can be what are the duties I.

The duties are to take charge of the records of the court, take care of the calendars, etc.; keep a judgment cook. We have clerks for the Naturalization Eureau. Ye also keep a general minute-book.

Isa't it possible to get along with less help I.

The force was cut down six of seven years ago,

force was cut down six of seven years ago, on the Court is not in session, what do the Court

and cierks do I

Fix up passers in my office,
is an at e-dant over there when the Judge who uppointed him is not on the bench I

Web. I think they imagine that it is their privilege to
dark duty when the Judge is away. They ought to be Is an extra charge ever made for naturalization paniers?

No. I wouldn't permit it. Sometimes a clerk may put on an American flar and charge 50 cents for it.
Do you mean to say that sometimes they don't charge st 50 for the American flog I
No, sir; they never do.

No, sir; they never do.

Haven't same people been charsed \$2.1

ENot that I knew of. I will remove a clerk to two
numbers if you tring proof to me of such a fact.

Senator McCarthy—Can you sweat positively that your
work from 9 a. m. to 4 p. m.?

ork from 9 a. m. (0 4 p. m.)
No sir; it is proviy hard to swear that.
Do they perform a dat's work as each=1
I am no going to swear that they perform a day's work every day.

I feel that a min who comes around at 3 a'clock and does a little work new, and a little again, then has three or loar weeks vacation—well I think it is a kind

f a sinceare.

I have given what information I can. The clerks as rule are bosy.

Well if your force was reduced, say four men, wouldn't if the work be done I.

I don't mak we could get along with less; if we had note they would be oney.

Senator McCarthy then introduced a resolution, which was adopted, calling on the Police Department to furnish a statement showing in detail the various sums received by it for, or on account of, or in relation to, the cleaning of streets from every source since May 1, 1873; the date each payment was received, and from whom received; and the amount of yearly expenditures made in cleaning

ARMY ORDERS.

Washington, Nov. 16 .- Lieutenants O. M. arter and G. W. Gorthals, Corps of Engineers, haven ordered to report to Lieutenaut-Colonel AL L Abbott, Co.ps of Eugineers, commanding Willer's Point N. Y., for duty with the bataillon of engineers. Th superintendent of the Mounted Recruiting Service has cen directed to send thirty recruits to Cheyenne, Wy. Yer., for assignment to the Toird Cavalry; also, to cause di avadable colored cavalry recruits to be forwarded to Santa Fe, New-Mexico, for assignment to the Ninth Saula Fe, New-Sexico, for assignment to the Ninth Cavalry. Hospital Steward Joseph W. Sezer, U. S. A. has been renewed from duty in the Department of Texas, and ordered to beport to the communing officer at Fort Columbus, New-Yers Barroot. Leave of absence for six months, with printesion to go beyond sea, has been granted Assistant-Surgoon L. S. Tesson, U. S. A. In the case of Whitau E. Creary, who was recently sentenced by court-most ful to be distilled from the service, the President to-day notificated the sentence to suspension for one year, with less of rank and one-half of his pay.

NAVY ORDERS.

Washington, Nov. 16 .- Paymaster Albert W. Bucon has reported his return home, having been de tuched from duty in charge of stores at Rio de Janeiro August 8, and has been ordered to settle his accounts The United State steamer Webusetts arrived Guayaquil, Eucadot, October 25, on her way to Pana The Lackawaana was at Arica, Peru, October 16.

A little girl read a composition before the

PROGRESS IN THE SCIENCES.

CIENTIFIC DISCUSSIONS IN THE NEW BUILDING OF

The fall meeting of the National Academy of Sciences began yesterday in the new building of Columbia College. Professor O. C. Marsh, of Yale College, the vice-president, occupied the chair. Among the members present were John . H. C. Coffin, U. S. N.; Professor George F. Barker, Philadelphia; James Hall, Albany; Samuel H. Scudder, Cambridge, Mass.: Professor Charles F. Chandler, Columbia College; Professor Walcott Gibbs, Cambridge, Mass.; J. Hammond Trumbull, Hartford; J. Sterry Hunt, Montreal; Professor B. Silliman, Yale College; Professor E. C. Pickering, Cambridge, Mass.; Professor C. A. Young, Princeton; Louis M. Rutherford, New-York; E. H. F. Peters, Hamilton College; Edward S. Morse, Salem, Mass.; Professor Edward D. Cope, Philadelphia; Professor H. A. Newton, New-Haven; Professor Alfred M. Meyer, Hoboken; Professor J. S. Newberry, Columbia School of Mines; Professor Henry Morton, Hoboken; Professo, John W. Draper, Hastings, N. Y.; Professor Ogden N. Rood and Professor Eggleston, New-York. Professor Marsh, after calling the Academy to order, stated that the present session was for the reading of scientific papers only.

RESEARCRES OF THE LAST YEAR.

Professor Alexander Agassiz arst occupied the attention of the session with a report on the dredging ernise of the United States steamer Blake, Commander Bartlett, in the summer of 1880. The cruise, he said, was undertaken with the object of determining the exact relation of the fauna of the Atlantic Ocean to that met with in the Gulf of Mexico and in the Caribbean Sea. In the Atlantic and Pacific Oceans deep-sea soundings have generally been made to a depth of 1,500 fathoms; in the Guif of Mexico to a depth of 450 fathoms. Work was begun in June last, south of Cape Hatteras, on a line parallel to the coast, and at an average distance of about 120 miles from it. Instead of finding a gently sloping sea-bed, as has

heretofore been supposed to exist in these latitudes the dredgers discovered what proved to be a contin nation of the platean of which the northern portion is known to extend as far as Cape St. George, and of which the southeasterly limit is supposed to rest on the Bahama Banks. The western ledge on this plateau was examined during last summer's cruise and proved very interesting from a geological point of view. The eastern slope has not been traced as yet. Its exact limits are a matter of conjecture, but are to be determined in next year's cruise. The sides of this plateau are steep. Three ship's lengths from a point where a lepth of 100 fathoms had been reached, the sounding apparatus did not strike bottom until 450 fathoms of the line had been paid out. The most anima life is found on the edge of the plateau. The character of the animals is, on the whole, the same a that of the species found in the Gulf of Mexico and the Cambbean Sea. The edges are composed of rich deposits of alluvia and mud, washed from the top of the plateau by the action of the Gulf Stream, he course of which extends ever the entire length of this Atlantic plateau. The deposits of numerou rivers flowing into the Atlantic Ocean serve to rich the western slope. These conditions are all fa vorable to the preservation of animal life on the edges of this submarine highland, while on its top no animal life is to be met with, a certain species of coral formation excepted .Alto together the success obtained by this expedition was great. The same set of officers has served for three consecutive seasons. The same amount of work which, in the course of the first year's ernise, required three months' time, during the past season has been accomplished in seven weeks. Work was continued day and night. The rapidity with which the soundings were made enabled eight dredges, each of them to the depth of \$00 fathoms, to be made every twentyfour hours. Formerly, one deep-sea sounding was considered a good day's work.

In conclusion, Professor Agassiz stated that a new set of officers was likely to be appointed by the Government for next year's cruise. This be regretted, as the efficiency of the service was likely to be impaired by substituting in-experienced men for those whose experience had largely contributed to the success of last summer's

STRUCTURE OF CERTAIN MINICAL VEINS, Professor Silliman followed Professor Agassiz with a short paper on "The intimate structure of certain mineral veins." The theory had been advanced some time ago, he said, that in some minerals there are cavities in watch there are obviously two fluids. The speaker had recently had the good fortune to verify the truth of the suggestion in the verus of stone found in Arizona. This was a black, hornblendic-looking rock, showing crystallized gold. This black rock formed a capping two or three feet in depth for a crystalline amorphous panriz, in which were stains of copper, iron and free goal in a finely divided condition. In this rock, quartz, in which were stains of copper, iron and free goal in a finely divided condition. In this rock, specimens of which were shown, were distinctly visione two fluids, one of which existed as an inner bubble, and which displayed almost constant activity of in tion. This second liquid was liquelied carbonic and. Small particles at the stone were placed upon a slide for examination. When warned, the carbonic acid expansed and did not show, but when permitted to become cold it was distinctly visible. Processor Shifman also stated that gold had been found in minimate relations with four-maline, and that quartz with gold found in Lower California, hear the Nevada line, was entirely desiture of sulphurets, showing that the intervention of iron saits as a selvent agent was not necessary in the formation of the deposits of gold. Professor T. Sterry Hunt, or Montreal agrees with the latter conclusion.

Professor Jumes Itali presented to the meeting his researches in determining the relations of the Openita and Montreas sandstone with the samusione of the Catskill Mountains. He stated that since 1869 he had been engaged in determining the fundamental arrived at the conclusion that a correct explanation regarding the formation et the rock lying between the gray sandstone, conglomerates, Catskill red rock and fed sandstone on one side, and the Hamilton group and innestone on the other, had not been

and red sandstone on one side, and the Hamilton group and innestone on the other, had not been

In this stratum fresh water shells, species of anadromites, red and gray, with immense number of fragamentary land plants, were to be met with It proves that at the close of the Hamilton perio-this geological formation was above the level of the

open sea. THE ATFERNOON SESSION.

At the opening of the afternoon session Professor Gibbs explained a new general method in analysis discovered by himself and brought to a certain degree of perfection by experiments. The former process of determining metals by electrolysis, he said, had been found operative with only one or two nerals, such as cadmium and mercury. The new method was simply to place the metal in solution in a beaker, add pure mercury and connect the mercury with an electric battery. By the electric action the metal was thrown down upon the mercary. It was necessary only to weigh the mercury and the beaker beforehand, and then arrer the process to determine the metal by again weighing the vessel and the mercury. This method, he said, was applicable to mercury, iin, cobalt and other metals. It did not apidy in assente and antimony. He did not despair of separating potassium and sodium by the process, attrongo his experiments with these metals had not completely successful. fessor flunt said this process came with the

Professor fluid said has process came with the beauty and force of a revelation; its simplicity recommended it. Every chemist would await further developments with great interest. He also asked what battery power was used. Professor Gibbs said the power of the battery was lammaterial, except in point of time. The stronger the power the shorter the time required for the process. PLECTRIC LIGHTS.

Professor Morton's first paper treated of some recent experiments made by him in deternating the electro-motive force of the Brush dynamo-electric machine. Various instruments for the accurate measurement of electric currents of great strength were first described, and then the measurements of

PROGRESS IN THE SCIENCES.

MEETING OF THE NATIONAL ACADEMY.

MENTIFIC DISCUSSIONS IN THE NEW BUILDING OF
COLUMBIA COLLEGE—DISTINGUISHED MEMBERS
PRESENT—DREP SEA SOUNDINGS, STRUCTURE OF
MINERAL VEINS, AND ELECTRIC LIGHTS—PAPEUS
BY PROFESSOES AGASSIZ, SILIMAN, GIBBS, MORTON AND OTHERS.

The fall meeting of the National Academy cult occurs, and thus show that each pair of coils is thrown out, not at the point where its force is least, but at that at which its electro-motive force is equal to that from which it breaks; thus suppress-ing a spark, but only at a certain sacrifice of theo-

retoal efficiency.

Professor Merton also rend a paper on the measurement of new forms of electric lamps operating by incandescence. After explaining his method of measurement, he gave the results of a number of experiments which he had recently made with the new Maxim lamp. In this lamp a filament of any carbonizable substance, such as paper or card, is placed in a globe. The globe is exhausted of air to a certain point and filled with the vapor of gasoline. The electric current is then passed through the globe. By a singular law, the decomposed gasoline becomes deposited upon the filament at the point where it is weakest and is carbonized there. This carbon finally becomes of the same conductivity with the rest of the filament, when the action of the intense heat seeks out the next weakest point of the filament, and this process is repeated indefinitely. This property of self-correction, Professor Morton said, was of great importance. The capacity of the lamp for developing light is remarkable. One of these lamps, employing a power of 40 candles, was run to 240 candles per horse-power; another of 52 candles, in reference to power, was run to 336 candles per horse-power. This latter lamp, with the power increased to 49 candles, was run to 136 candles per horse-power. This latter lamp, with the power increased to 49 candles, was run to 426 candles per horse-power, and with the power of 98 candles was run to 607 candles per horse-power. This latter lamp, with the power and, it is said, it has been run to 4,500 candles per horse-power. The law has been discovered of the intensity of action. It has also been found that the restalance decreased with the increase of the intensity of action. It has also here found that the restalance decreased with the increase of temperature. stical efficiency. Professor Morton also read a paper on the measure

Professor Cibbs expressed much astomshment at horse-power had been to the power in the electric current, measured in the usual way, and not to the power in the machine. He added that he would great like to compare the Maxim lamp with Edison latest lamps provided with fulaments of bambo cane. By an accident to his apparatus Mr. Edison had not been able to redeem a promise to sanu Professor Morton one of his lamps, but Mr. Edison had written him to the effect that his latest samps with 16 candle power had been run to 55 candles per horse power, as against 120 candles per horse power in his horse-above carbon lamp. This result compared with the result obtained with the Maxim

pared with the result obtained with the Maxim lamp as 155 to 210.

Professor Barker said that he was much interrested in the Edison and the incandescent lamps, and that the statements made by Professor Morton certainty marked a year of great progress in electric lighting. One of the greatest efficienties had been in making a fibre that would not disintegrate. A banaboo ibre at lifty candle power lasted about an hour. The lamp of Mr. Maxim was a great step in advance, it practically caused the fibre to last indefinitely. He understood that Mr. Edison had recently been working in the same direction.

Professor E. D. Cope followed Professor Morton with the papers on Nigrayal designed Minerol Caniwith two papers on Minravidae and Miccene Cani-dae. He described certain types of felidae now ex-tinct, and ascribed their destruction to lack of food supply. Their functions were the same those of the present felidae. It these, only in a greater degree they destru-ularger portion of life than they were able The Council of the Academy will meet at 10:30 o'clock this morning. The regular session wi held in the same room, and will begin at 12 in.

GENERAL SICKLES BEFORE THE WAR.

A LETTER WHICH OPENED HIS EYES TO THE REAL CHARACTER OF THE DEVILS HE WAS SERVING.

To the Editor of The Tribune. Sin: Now that Mr. Sichles rejoices in Tammany finis, that he has got back home, it is interesting to go back its only years in our his ony, to the time when Congress had left Washington to join in organizing re-bellion, the Republican party was trying to enset measdefence of the country until Lacy were ready for war. such inclusives were proposed in the House. This course he pursued week after week. A keen young of the House, resolved to silence Sickles. He accord

Hon. DANIEL E. SIGKLES.

FIR: Waite I was walking up the Avenue to-day beideal two Southern members of Congress, one said,
"what can we do for Sickles I" The reply was, "lethim go on doog our dury work until we get things fixed
for southern hedependence. Then we can quartly dump
him out of hes tait of the surt." Admiring your talent
as I do, it makes me indignant that those whom you are
so stroubly allows, should souch of you in such terms of as I to, it has not been so signally sides, should socak of you in such so signally sides, should socak of you in such so so signally sides. Yours truly, J. H., of New-York. ak of you in such terms of

The next morning " J. H." was early in the gallery to watch the effect of his letter. The pages placed the mail matter of saca member on his desk. Sickles came in, fauttlessly dressed, as usual, removed his gloves, and began to open and read his letters. The first one happened to be the letter from "J. H.;" the envelope, being of a peculiar form and color, was castly recognized by the writer at his distance. Sickles read it with increas ing interest, and medicated a mement, read it again, and carefully folding it, placed it in his breast pocket, and putting the other letters unopened in another pocket arose, pale and digo flot, buttoned his overcoat to the arose, pair and digo fied, buttoned his evercoat to the chin, walked out of the House, and was not seen in his sear for a week, and fever again attempted to obstruct to the point of the Army, and effective service for the Union, acted with the Republican party, enjoyed its honors with its offices as bong as no could get them, and when he thought "a change" was coming slipped over the fence, and landed to Tranmany Hall, and with forces and Enjoyed its offices to more allowed to receive "the ring" in "bost role" and the carected vest.

New-lark, Nov. 15, 1889.

MR. HEWITT AND THE FORGERY.

WHEN AND WHERE DID GENERAL GARRIELD EX-PRESS VIEWS IN HARMONY WOLD THE SENTI-MENTS OF THE FORGED LUTTER! to the Editor of The Tribune

Sin: Mr. Hewitt, in his reply to your note

the Morey trap by saying that the sentiments of the views of General Garfield prior to his letter of accept' mee." If this statement can be established it will naturally do something to soften the severity of the ombine judgment in regard to the part of Mr. Hewitt in this discreditable affair. As one of those who esire to commune to think well of Mr. Hewitt, I write to ask you to what expression of General Gurfield's " sentiments prior to his letter of acc prane c' Mr. Hewlit here refers. My impression is that during the canvass the importation of such sentiments to the Republican candidate was not uncommon with Demo cratte speakers; but if any of them cited any public at the imputation, I falled to see If. Had there been, any where among General Gardeld's numerous and volumiors speedles in Congress or elsewhere, in any authentic report of his conversa im any authentic report of his conversa-tions, any occlaration "in barmony with the views" expressed in this in amous forcery, woat would be the possible need of using a document of so assignations appearance and so doubtful origin as this I Why would it not have better, and a great deal more effective, in circulate the unquestioned avoisals of the cardicate, made in circulassances which would have report definal impossible, thus to rest the whole en-e-upon a private letter, addressed to an unknown person, ad voiched for by no respectable authority I New York, Nov. 14, 1880. INDEPENDENT

INFRINGEMENT OF A PATENT.

The success which the plaintiff has met with in the sait of Christopher C. Campbell against the Postmaster of New-York to recover damages for infringement of a patent postmarking and cancelling tamp has led to the institution of suits by the same plaintiff against the Postmasters of the following walk, Hartford, Puterson, Newark, Elizabeth, Lowell Worcester, Boston, Pittsfield, Springfield and Jersey City. In the suit against the Postmaster of New York the United States Circuit Court awarded \$63,000 damages, and the case has been carried to the United States Supreme Court. So confident of the result, however, is the plaintoff that the above suits have been action against the begun, and too intention is to bring action against the ever, is the plaintiff that the above anits have been begun, and too intention is to bring action again t the Postmaster of every office in the United states in which the patent has been intringed. Benjamin P. Butler, George H. Williams, of Washington, and Marcus P. Notjon, of Troy, are the counsel for the plaintiff in the soits.

HEDDEN FOUND GUILTY.

TRENTON, N. J., Nov. 15 .- The jury in the case of James A Henden, the defaulting custier of the First National Bank of Newark, brought in a veguilty this afternoon. The charge was embezzlement and malfeasance in office.

THE FORSYTH STREET MURDER.

EVIDENCE AGAINST F. J. MUNZBERG. APPEARANCE OF THE PRISONER-MRS. LINDHAUER'S

GRAPHIC ACCOUNT OF HER HUSBAND'S DEATH-A BEAVE WOMAN WHO TESTIFIED IN AN UNCON-CERNED WAY. Pleas of insanity as a defence to charges of

murder have not recently been of such frequent occur

rence as they were a few years ago,

heavy crape veil, which she threw

and his family took adjoining rooms in the

translated by an interpreter.

n the Supreme Court, See Batzeit Henry Lewis no James Biumenthal. The awards to property-ever amounted to \$668 653, and the expenses connected with the work of the Commission to \$46,471 45. Corporation Counsel Wortney said that in making the customary motion for confirmation of the reports the courts regarded such pleas more favor-ably. This defence in the case of Frederick J. considered it proper to call the attention of the Court a some facts that might make it necessary to send in report back to the Commission before confirmate. It presented the affidavit of Deputy Controller McDon Munaberg, now on trini for his life, has added interest to a trul that presents a number of dramatic features presented the sill day it of Deputy Controller McDah, setting forth that the land at the east and at the set of of One-hundred-and-thirty-silk-hes had been out by a previous Commission, and therefore if any nearly nominal. It was also contended that he are merely nominal. It was also contended that he desired to the owners in this case it should a unconstitutional, as the title did not define the period to value land taken for streets which was composed to the statute tiself.

J. C. Singer contended, on the other hand, that he are then contended to the court on the contended of the report excepting to show from Demand was reserved. The court-room of Oyer and Termicer, where Justice Davis is presiding in this case, was almost as densely crowded yesterday as during the Philp trial. It was no until 12 o'clock that the last joryman was impanelled. The prisoner throughout the day sat beside his counsel with his head bowed down, staring vacantly and paying to attention apparently to what was passing around him. He has an ugly face, brutal and low-browed, and apparently without a

THE COURTS.

DAMAGES FOR OPENING STREETS.

The report of the Commissioners in the

atter of the opening of One-hundre land-thirty eight.

at, and thirteen other streets and avenues is the upper

part of the city, was brought before Justice Lawrence in the Supreme Court, Special Term, y steelay, La

trace of intelligence. His wife sitabeside him with a babe in her arms, looking wretched and hopeless. Their two DECISIONS-Nov. 16. little children are allowed to amuse themselves as they Supreme Court - Chambers - Rv Judge Bonoine, Callin jr, act. Hirselfield - Plaintil may discontinue as ment of coots. Houseff are, Holmorf. No island of of meter. Barberts and Elect. Report courtings of ser-on denied. Moranes are, Moranes. Proc. 1981. please around the lawyers' table, or to pick their way here and there among the spectators. Mrs. Munzberg's feelings at times seem to be almost beyond her control. Once while Assistant District Altorney Bell was opening the case for the proson-tion and was using strong language regarding her husband's erime, the woman started up with glaring eyes, and seizing from the table a minter's trowel used in evidence would propably have thrown it at Mr. Bell people. Mrs. Emily Lindhager, the widow of the mur-dered map, was first called. She is a little German Her dress was the deepest mourning, with a from her face when she began to testify. She displayed ne vindictiveness toward the prisoner, but told the story of the murder in a calm and womaniy manner, without tears and without any display for dramatic effect. Sue spoke English so imperfectly that her testimony was She and her husband, she said, buran to live at No. 45 Forsyth-st. in the early part of last summer, at the same time that Mr. Munsberg

same tenement house. They were both of them house painters, and Lindhauer seems to have been the more successful in securing employment. On July 28 the husband of the wilness was mixing paint in the back yard wh ... Munzberg came in and began to pick a quarrel with him, saying : " You are a second hand painter ; you took away from me the work I was to get." Lindhoner tried to quiet him, but only succeeded in arousing his anger the more, and Munzberg tried to get Lindhauer to fight. Mrs. Lindhaner interceded, and snatching By Judge Lawrence.-Demorast agt. McCreeny.-See hos-Munzberg by the arm told him to stop In a passion he turned upon her and struck her a blow in the face, breaking the skin so that the blood flowed Social Term-By Judge Van Votst. Co sini agt Comp. freely. Lindbauer, too, became angry at this, and, with ettied. Circuit-Furt II-By Judge Van Verst-Wilson art Frist tal.—Case and ameniments settled.
Circuit-Furt III-By Judge Van Verst-Thompson art sultvan, etc.—Judgment for pastniff vide ophana.
Superior Court—Special Term—By Judge Russell.—Bark agt. Bows, etc.—Beautrer sustained with large garend complaint on payment of coole; see ophilia. Flame ggt. Green.—Findings settled. Borbinan agt. Brest-Originated. Botton act. Core et al.: Saue agt. Hunning.—Originated. Botton act. Core et al.: Saue agt. Hunning.—Originated. the trowel which he had beside him, struck Munzberg on the head. His scalp was cut, and he was bleeding from the wound when Lindhauer and his wife went into the nouse. Munzberg followed them, and as soon as he found Lindbauer in his rooms he hurted at him a gless which he took from a shelf. The missile did not strike Lindhauer, and Munzberg would have thrown another if Mrs. Lindhauer and Mrs. Evertz, a neighbor, By andge Freeman. -Palmer et al. agt. the who was present, had not prevented him and put him out of the room, locking the door. From their fear of Munzberg both Lindhauer and his wife slept two nights at a neighbor's. Two days afterward Lindbauer and his wife made complaint against Mu. zberg and had aim ar raigned before Police Justice Ottenhourg. He was die charged with a reprimend. The shooting, which took place the following Monday, is best described in Mrs. Landanuer's own words: "My husband," she said, "was slitting in a rockingnacher act. Claum.—Process granted.

Common Picas—Special Icrm.—By Judge Larrence,
Carier, dec., act. Helaman.—Judgment of forcelosize ad
the artered. Hooley and others act. Green and others,
refer maintain the judgment of the Court of Appeals they
tent of this court. Schultz act. Hoogland and others.—Ap-

"My busined," she said, " was strong in a ball and march in our rooms when Munzbergeame up the hall and march into ris rooms. Prairly soon he came back and intered our door. He said nothing, but counted the part of a time into another and first. My husband jamoed in add said; 'I'm shail,' He ran into a bedroom and locked the door. Manzberg arrest the door open and hed in a lie bedroom. He selzed my husband by the sense and my husband fail over him. I asked him is ran into the street, I meanwhile serong the revolver a bolding it back. Minaberg held the revolver ard me, and said if I this not let go be world shoot. He kept the pistol pointed at me as he backed out the room. I followed him into the street, to find my loand lying dead on the pavement." Its Anna Evertz, who was prespit when the shooting a place, gave substantially the same evidence, instay Bergham, who keeps a shop on the opposite of the street, saw the rate men rush this the street is dead annot a crowd.

she said, to be passing along Forsynt-st. the day of the murder, when she saw a hall man rangout of an alley, tollowed by a shorter man with a piscol in his hand. The shorter man tried to shoot the other, but missed his aim and ac tried again. The tailer man fell down, and while he was lying down the already shall his witness, "and took the man with the piscol by the wrist, and holding it with one hand took the mistol away from min with the other and put it behind my back. He caught my arm and tore a bracelet from it, but I broke from him and ran across the street, where I met a police-man and cave the pistol to him and he arrested the man. That's all I know of the matter."

Stoaptan G. W. Gastin, of the Steambeat Squad, testified to the manner in which the prisoner conducted almost fafter the arrest. He said that he shot the man "to get satisfaction," and that he would do it again under the same circumstances. Officer Hearry Bedell gave similar testimony, and also told how he arrested shruckers.

Henry Mandstadt, a greecryman, who also keeps a bar at liester and Forsyth-sis, its affect that on the Friday might preceding the number Munzberg came into his place and called for a giass of beer. When the glass was put on the counter Munzberg had a pistol in his band. He said excitedly: "I'm going to save myself with this from a witewasher and then go to court and see if I can' get my tights." "I told him, said the witness," to be an honest saan and go hom; but he wouldn't, He was more excited. He would wate around the room mutterior, then come back and take up his glass again and it was some time before I could see him away. I know that he was not intoxicated at that time."

The testimony for the defence will be presented today. Justice Davis allowed the farears to go to their homes moder the injunction to read no newspapers and talk with no one about the case.

ALLEGED BREACH OF PROMISE.

Sheriff Van Voorhis, of Passaie County, N. J., served a summons yesterday on William S. Guillerre, a monther of the firm of J. M. Shaw & Co., china dealers at No. 25 Duane-st., this city, in a sait brought in th New-Jersey Supreme Court to recover \$25,000 darance. for breach of promise of marriage. Mr. Gutierrez lives at Passair City, N. J., and Is a member of the Common Council. He is a wislower, with five adult children. The council. He is a wholever, who are small condition. The parametric Miss Abbott of Centreville, N. J. Miss Abbott alleges that Mr. Gutterrez was very attentive to her, and that I have were engaged to be married, and that the extensory was to take place in the latter perton of this mouth. The suit is brought on the ground that Mr. Gutterrez has transferred his affections to a young woman whom he nest at Saratogs last summer.

DISTRICT LICENSE LAW AND THE PASTORS. INT TELEGRAPH TO THE TRIBUTE!

Washington, Nov. 16,-The Pastors' Union mbracing a large number of the ministers of the city net yesterday and took up the subject of the r ported concurrence of the President with the District Commissioners upon the question of Henrica for bar-rooms about the Gov. rument buildings and grounds. It was decided to append a committee to wait upon him.

CHILDREN ACCIDENTALLY POISONED.

PHILADELPHIA, Nov. 15 .- A special from Wilmington, Del., says; "Three small chibiren of Hyalt Hutton died here last week. It was thought that death was caused by scarlet fever, but accidental poisoning it is now believed was the probable cause. It is states that the children are uncooked sweet polatoes, on the vines of which Paris green had been sprinkled."

ATTEMPT TO WRECK A TRAIN.

The section men, Monday morning, found bstructions on the Long Island Railroad, a few miles west of Riverhead, just before the arrival of the express rain. They caught a man named Robinson running away and took him to Riversead, where Justice Perkins commisted him to Jail to await the Grand Jury's a There are some indications that Robinson is insure

Just before the election an Irish voter in San Prace see tail his master, on Englishman, that he was going to vote against Garfield because of the "Chinese" letter. "Don's von know "sand the master, "that letter is a forecry I Every intelligent man is actival dithat it is." "Begoria," replied Patrick. "that's the very raison I can't come intensity vote for ony mon who would write a forged letter!" "It's not that the flies bother me that I

UNITED STATES SUPREME COURT. Washington, Nov. 16,-The following bail ness was transacted by the Supreme Court of the Ustel

States to-day:

No. 67.—William Bean, plaintiff in error, art. 6. H. We margion et al. in error from Pennsylvania.—On metical counse for plaintiff in error, disnosed with costs.

No. 67.—Pice Goodyear Denial Vincarile Company, appliant, agl. Charles 6. Pavin; appeal from Massachueits. editaris of patent) argnor by William H. Chiera.

Allowaged until to-morrow at 100m.

Buckelew.-Judgment affirmed and joiceds Cort act campbell t Eaton agt. Webs. - Other animal will Van Cott agt. Van Cott. -Order afficined without costs. Prophes cellings, the Common Council of Trop. At

THE COURT OF APPEALS.

ALBANY, Nov. 16 .- In the Court of Appeals

e-day, present the H is, Charles J. Folcor, C.J., and associates, the following outmost was transacted:

Smith agt. Holbrook; Green ant. the House

etica approved. Rent age. Burn-Judgue

awes. -- Higgins agt. Webs. -- Definit opened on

CALENDARS THIS DAY.

pens at 1030 s. m. — riminal business.

Paur 11—Ssiith, J.—Court opens at 1030 a. m.—Na.
1700, 2107, 1106, 1039, 1064, 1982, 1978, 1172, 4133, 334,
112, 2082, 0077, 2611, 1198, 220, 3568, 1143, 2113, 134.

PART III - Van Vors, I. - Court opens at 1033 a.m. - Na. 510, 105 5 524, 2344, 3871, 220, 236, 324, 230, 38, 30, 1028, 4450, 5754, 662, 1029, 2241, 32, 59, 3714, 331, 311, 2273, 3873,

TO A. M. Color or called at 11 a. H. Proposition Nos. 18 50 (Constant Trans-C. P. Daly C. J. and J. Constant van 170 s. J. J. Constant Constant van 170 s. J. J. Constant Constant van 170 s. J. J. Constant van 170 s. J. J. Loo, 177 dec. 100, 136, 136

15.

Page I-Van Brunt, J.
get H. Room, Nos. 196, co

38, 1 3, 143, 141, 145, 146, 148, 150, 1 28, 13, 143, 143, 145, 146, 148, 150, 1

contract; seems Masse us, grant or teen, David Schalatela, receiving stores born Seculitier abone door, Wolfan A. Cener, John C. Harris, Burghay, PART II.-Smeth, R. The People ago, pretomess, Michael Scholly, Edward patrices, Pobbery, John F. Hogers, John Ballics, Pobbery, John F. Hogers, John

William H. Shippley John Williams, Cl. 3. Cooper, strain larceny; Thomas Ker Jarles Barnes, Charles Meck v. o-atom OTER AND FERMINES—Pavis, J.—Con-the People agt. Americe Ligor, Louisco

ry-Special Trux-Presiman L.-Courseparter called at 11 a. m.-Reid in Part II

at 11 a m-

17: onens at li &

Post 7-Dets 4555, 3684

a m filesh, false i. Joseph Pta-L Janua Bendat, 21 11 11 11 11 12 12 petit larrest.

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as Fire It-

PART ILI-V

and so trial fee, latter to shide the event,
-mai experimence and action dismissed on
roots. Davis agt showwood. Comment of a
Culbert art Hawes. I wish to see course.
Epstem.—Optimo filed.

appeal.
The following cases we cargued :
The following cases we cargued :
No. 256. Gideon G. Siephens, respondent, agl. Samuel II-No. 250. Cinicon to Scieptens, respondent, agt. Samed & Fox, appellant.
No. citie. Pravia Plainy, respondent, agt. the Phenix Rask of the City of New Yers.
The day calendar for Wednesday. November 17, 1884.0 st. rollows: Nos. 3dd, 360, 372, 373, 374, 377, 350, 316. It was ordered to at the Court take a recess from Friday, (8) 19th met, unto Monday the With inst.

States to-day :

hate to be build-headed," he said, "but every time a har leader troupe comes to town my wife watches me as acat would a mouse, and every man I meet as a me how I liked the performance. It doin't used to be ac."—[Bus-